



**Meeting Notes – NBII Urban Biodiversity Information Node (UrBIN)
Second Stakeholders Informational Meeting
Hosted by the Virginia Tech College of Natural Resources
April 19, 2002**

Attendees

Kathleen Beeton	Alexandria Dept of Zoning & Planning
Todd Bolton	Fairfax County Park Authority
Margaret Bryant	Virginia Tech Department of Landscape Architecture
Ben Burnett	Office of Management and Budget
Rob Dietz	US Geological Survey – Biological Resources Discipline
Dave Eckert	Concerned citizen and filmmaker
Jacob Faibisch	International Association of Fish and Wildlife Agencies
Stuart Finley	Lake Barcroft Watershed Improvement District
Jason Freihage	Office of Management and Budget
Sara Gann	Virginia Tech College of Natural Resources
Tricia Gibbons	Moderator, Lead Alliance
Chris Gjetnes	Virginia Tech College of Natural Resources
Dawn Godwin	National Park Service – Rivers, Trails and Conservation Assistance
Bill Hicks	Alexandria Dept. of Transportation and Environmental Services
Lief Horwitz	US Geological Survey – Biological Resources Discipline
Moonsun Jeong	Virginia Tech Department of Landscape Architecture
Noel Kaplan	Fairfax County Department of Planning and Zoning
Marcus Koenen	National Park Service – National Capitol Region
Brian LeCouteur	Metropolitan Washington Council of Governments
Monica Lipscomb	Virginia Tech Department of Landscape Architecture
Mikaila Milton	National Park Service – National Capitol Region
Debbie Moore	US Geological Survey – Budget Office
Katherine Mull	Northern Virginia Regional Commission
Matt Myers	Fairfax County Dept. of Public Works and Environmental Services
Christopher Rademacher	Sierra Club
Andy Rosenberger	Virginia Tech Conservation Management Institute
Scott Sizer	Fairfax County Park Authority
Robert Slusser	Virginia Tech College of Natural Resources
David Trauger	Virginia Tech College of Natural Resources
Ravi Vukkadala	Virginia Tech Computer Science
Jeff Waldon	Virginia Tech Conservation Management Institute
Zhifang Wang	Virginia Tech Department of Landscape Architecture
Bob Worrest	Columbia University
Ken Young	Virginia Lakes & Watersheds Association



Meeting Summary

The purpose of this meeting was to invite watershed (Holmes Run, Tripps Run, Lake Barcroft, Cameron Run, and Hunting Creek) stakeholders to participate in the formulation of data and products for the pilot project of the NBII Urban Biodiversity Node. The objective of the pilot is to consider a variety of issues that affect urban biodiversity in the watershed, including sprawl, habitat fragmentation, degradation and loss, and water and air quality. The final products are intended to provide users with an array of data, tools, and support to assist them in making sound, environmentally responsible decisions.

Thanks to the Virginia Tech College of Natural Resources for hosting the meeting at the Northern Virginia Center and providing lunch and parking. Also, thanks to Bob Slusser for handling the meeting logistics and Tricia Gibbons of the Lead Alliance for her role as facilitator.

The meeting ran from 10 AM to 2 PM on April 19th, 2002, and was divided into two main sections: (1) update and summary of progress, and (2) breakout sessions on involving stakeholders in planned urban biodiversity information projects. After learning about ongoing and planned UrBIN activities and contemplating collaborative opportunities during lunch, stakeholders split up into four breakout sessions (five sessions were originally planned, but the website and information compilation session was postponed until more plans are in place). The four sessions, based directly on planned UrBIN projects, were (1) GIS Data Acquisition and Synthesis, (2) Landscape Characterization and Spatial Analysis, (3) Environmental Education, and (4) Biological and Physical Characterization. Each of the four sessions coincidentally had four goals:

1. Discuss details of the project, focusing on planned activities and any work that has been completed to date;
2. Find out who wants to participate in planned activities and how they can help (i.e., can they supply staff time, information resources, contacts etc.);
3. Understand how the project results/products can be made more useful to stakeholders and other user groups;
4. Consider and discuss a framework for moving forward with project participation.



Active participation from the group, especially through contributions in the breakout sessions and pursuant discussions, generated a productive meeting with many constructive ideas. As summarized below, there are opportunities for stakeholder involvement in all of the UrBIN projects.

Breakout Sessions

Breakout Session 1: GIS Data Acquisition and Synthesis

This breakout session focused mainly on the third goal – making products more useful to stakeholders. Key ideas and conclusions include:

- Fairfax County and the city of Alexandria use the State Plane coordinate system for northern Virginia and the North American Datum of 1983, so these parameters will be used for UrBIN data.
- The scale of the pilot watershed is a useful unit for dividing a metropolitan area.
- The most important value-added feature of the GIS synthesis is integration of data across political boundaries, so that local governments and citizens can view and analyze data from ecological and regional perspectives.
- Three-dimensional data could help to visualize the impacts of development on the watershed, but these data are not as high a priority as some other datasets, like high-quality, large-scale land use. Local universities might be able to help with 3-D projects.
- Local datasets generally do not have FGDC-compliant metadata, and development of such metadata through NBII would be beneficial.
- Data should be provided over the Internet at two levels: (1) simple layers that can be viewed in an online GIS (e.g., watershed boundaries, parcels, trails, roads, water features, green infrastructure, and biodiversity resources), and (2) all layers for downloading by an experienced GIS user.

In addition to usability, the GIS breakout session also addressed stakeholder participation through data contribution. Looking to the future, it will be important to establish a plan for updating spatial data and setting a temporal scale. It will also be useful to document lessons learned when similar projects are undertaken in other watersheds.

Breakout Session 2: Landscape Characterization and Spatial Analysis

This breakout session concentrated on data and information needs that are of the highest priority. Key findings include:

- Land use/land cover imagery, stream characterization, and retrofit/redevelopment activities are needed on regular time intervals for the watershed.
- Calculation of the rate of change for a number of variables (e.g., building permits, vacant lands, real estate taxes, and zoning approvals) will be necessary to characterize the watershed more fully.



- Future potential land use changes will have to be stressed, based on historic trend data and analysis of current policies.
- The information developed through the landscape characterization has great potential for use by stakeholders, including prioritization of restoration efforts, controlling invasive species, identification of biodiversity hot spots, identification of data gaps and future research needs, modeling of alternative development scenarios, and detection of gaps in conservation corridors.

This breakout session also highlighted the importance of linking to existing watershed planning initiatives and keeping stakeholders informed.

Breakout Session 3: Environmental Education

The education breakout session focused on how to make planned activities more effective. Main ideas from the session include:

- A list of organizations that can participate in watershed education days needs to be generated, and these organizations, in turn, can provide educational activities.
- One watershed education day should be on a weekend so that watershed citizens can participate.
- Teacher resources, including “lite lesson plans” should be put on the UrBIN website, and these resources should be password protected.
- In order to help teachers decide where to get high-quality information, various organizations could be rated and their work could be summarized.
- Earthforce is one such organization that could provide useful materials.

Specific recommendations for the UrBIN education project are:

- Develop easily organized lesson plans that are referenced to the standards of learning.
- Study and summarize existing educational programs in the watershed.
- Produce a publication (likely web-based) with relevant lesson plans and activities.
- Connect watershed education days to other USGS water education projects.

Breakout Session 4: Biological and Physical Characterization

This session concentrated on existing and known future data, end uses of data, and participants in the data aggregation process. Key findings include:

- Existing datasets comprise state vertebrate surveys; bird lists/counts from the VA Society of Ornithology and the Fairfax Audubon Society; limited tree cover; fish studies and biomass by species in Lake Barcroft from the Watershed Improvement District; amphibians, vegetation, and fish surveys from George Mason University (Profs. Ernst, Bradley, and Kelso); and volunteer macroinvertebrate surveys from the Northern Virginia Soil and Water Conservation District.



- Known future datasets include a green infrastructure map for metropolitan DC from MWWOG and digital aerial topographic information from the city of Alexandria.
- End uses of the data include establishment of a baseline for future comparisons, identification of important resources and threats, inputs to trend analyses, aid to local governments involved in watershed planning, prioritization of restoration activities, long-term research and monitoring, provision of information for citizens, and decision support.
- The city of Alexandria can participate by providing information from its digitized aerial photography, biological inventory of floodways, cross-sectional information along weirs in Holmes Run, and a potential stream inventory.
- Fairfax County can provide information from its subwatershed analysis for the watershed management plan, natural resources map, perennial stream mapping and assessment, forest stand inventories, and habitat analyses.
- The National Park Service can provide reference data from Quantico Creek.

Next Steps

Overall, the meeting generated a number of useful ideas, as well as lively discussions. After brief presentations by the leaders of the breakout sessions, the group discussed various actions, ranging from upcoming workshops and the subject of the next UrBIN stakeholders meeting to increasing the robustness of UrBIN projects. These actions, along with the results of the breakout groups, will help steer UrBIN projects as they progress, so that they will be more useful to stakeholders. Where indicated, stakeholders will provide direct input and expertise to the projects.